



OPTICAL SYSTEMS GROUP

SPECIAL REPORT

**LEASE VERSUS PURCHASE
OF EQUIPMENT**

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KWAJALEIN MISSILE RANGE
YUMA PROVING GROUND
DUGWAY PROVING GROUND
ABERDEEN TEST CENTER
NATIONAL TRAINING CENTER
ELECTRONIC PROVING GROUND**

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PACIFIC MISSILE RANGE FACILITY
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SPECIAL REPORT

**LEAVE VERSUS PURCHASE
OF EQUIPMENT**

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**Prepared by
OPTICAL SYSTEMS GROUP**

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1. **INTRODUCTION.** This report is the result of an effort by the Range Commanders Council (RCC) Optical Systems Group (OSG) to assist users in determining the financial benefits of leasing or purchasing optical equipment. The initial study considered nine software applications that could be used in making the decision to lease or purchase equipment. Five programs were removed from consideration after it was determined they did not work well or were not as useful as the remaining four programs.

2. **APPROACH.** A task committee was formed within the Photo Lab Committee of the OSG. The committee members selected the applications shown in paragraph 3 for evaluation. The applications take into account only the financial aspect of an acquisition. The following components should also be considered when determining lease versus purchase.

- a. Reasons for leasing
 - Help smooth budget spikes
 - Facilitate rapid technology deployment
 - Facilitate standardization efforts
 - Provide an effective disposal strategy for used equipment
- b. Reasons for not leasing
 - Lack of an in-house Information Technology (IT) Asset Management Program
 - Unacceptable risks of signing a multi-year contract committing to one technology or vendor
 - Requirements for custom or one-of-a-kind hardware
 - Inability to strictly adhere to contract length, terms, and conditions
- c. Financial considerations
 - Outline costs associated with current procurement methods and equipment management. These costs include:
 - Acquisition costs
 - Asset management costs
 - IT support costs
 - Disposal costs
 - Calculate the respective costs of leasing or purchasing equipment

3. **EVALUATION.** The following software applications were evaluated for this report. The first three applications run on Microsoft Windows[®] and the fourth program runs on Mac OSX[®]. All of the applications can be downloaded for a trial period.

- a. Financial Calculator
 - Version 1.1.1 is available at <http://www.rwent.com>.
 - Calculator has a 15-day trial with full capability.
 - Cost of the software is \$19.95.
 - This application has more functionality than just lease calculation, but the extra features are not particularly useful for our purposes.

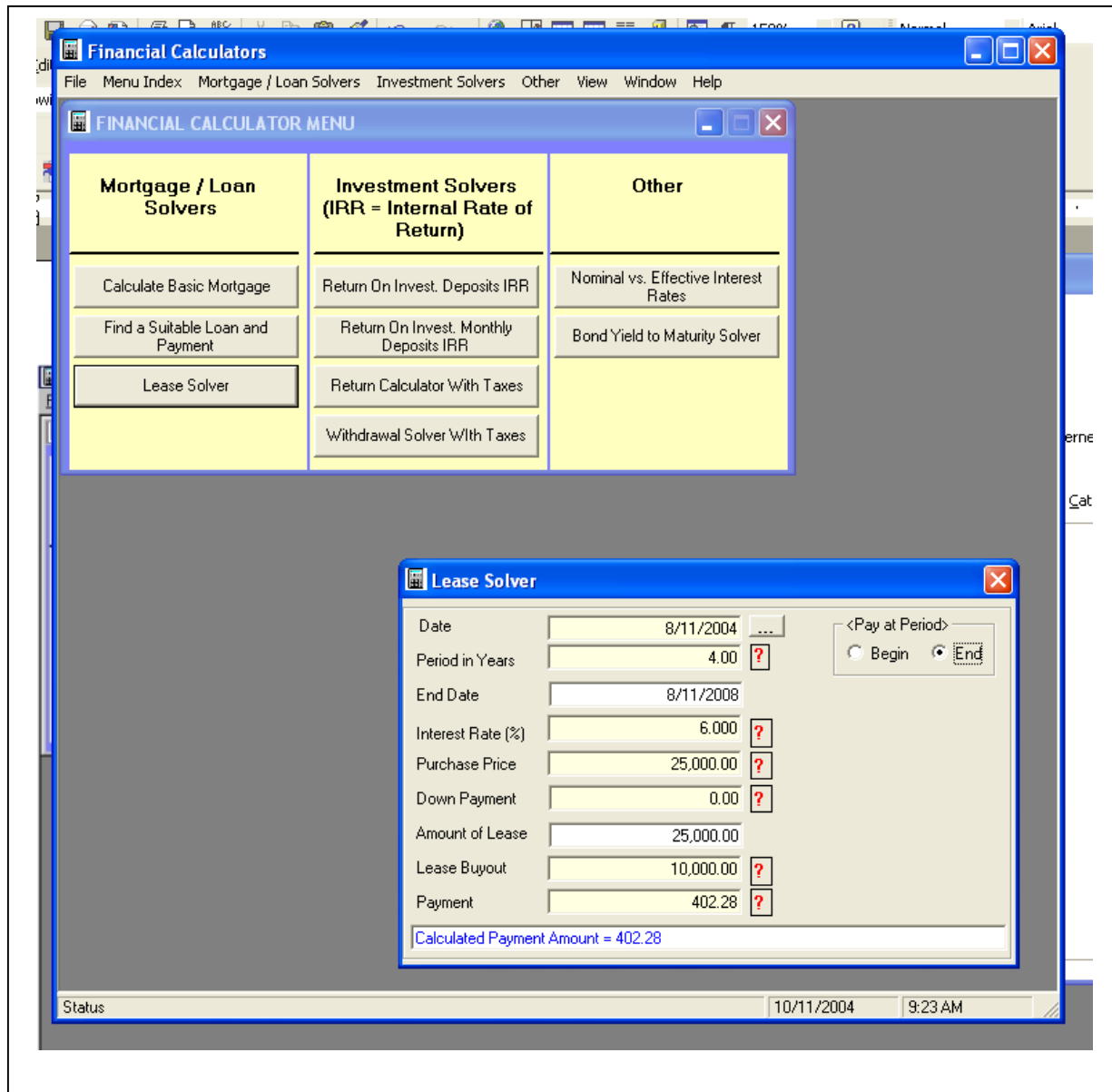


Figure 1. Financial Calculators, Version 1.1.1 (screen shot).

Features: Lease Solver

- Period in Years
- Interest Rate
- Purchase Price
- Down Payment
- Lease Buyout
- Payment

b. Lease Calc Pro

- Version 1.0 is available at <http://www.almsysinc.com>.
- Program has a 30-day full use trial period.
- Cost of the software is \$9.95.
- This calculator is slanted toward the automotive industry but the boxes that pertain to vehicle information can be ignored.

Lease Calc Pro - Unregistered Version

File Tools Help Register Now

Calculate | Lease Charges | Amortization | Name / Address | Co-Lessee | Vehicle | Insurance | Depreciation | Quote | Trade

Base Values

1. Capitalized Cost:
Net Capitalized Cost:
2. End Value (Residual): ☐ \$0 - or - Residual %:
3. Interest Rate: ☐ No Rate - or - Money Factor: Use Money Factor: ☐ Yes ☒ No
4. Term:
5. Base Payment Amount:
30 days left in trial
Provide 4 of the 5 above fields and the 5th one will be calculated for you.

Calculation Options

Calculation Type?
☐ Standard
☐ Standard w/ Interest
☒ Spreadsheet
Is the first payment to be included in the Net Capitalized Cost?
☐ Yes ☒ No

Calculated Results

Total Base Payment:
Taxable Base Payment:
Sales/Use Tax Percent:
Sales/Use Tax Amount:
Total Monthly Payment:
Due On Delivery:
Control Number:

Optional Data

Taxes (%)	Accumulative?	GST / PST?	Description	Resulting \$
1. <input type="text" value="0.00000"/>	<input checked="" type="checkbox"/>	G P N	<input type="text"/>	<input type="text" value="\$0.00"/>
2. <input type="text" value="0.00000"/>	<input checked="" type="checkbox"/>	G P N	<input type="text"/>	<input type="text" value="\$0.00"/>
3. <input type="text" value="0.00000"/>	<input checked="" type="checkbox"/>	G P N	<input type="text"/>	<input type="text" value="\$0.00"/>
4. <input type="text" value="0.00000"/>	<input checked="" type="checkbox"/>	G P N	<input type="text"/>	<input type="text" value="\$0.00"/>
5. <input type="text" value="0.00000"/>	<input checked="" type="checkbox"/>	G P N	<input type="text"/>	<input type="text" value="\$0.00"/>

Taxable Add-On to Base Payment Amount:
Amount of Net Capitalized Cost that is Non-taxable:

Figure 2. Lease Calc Pro, Version 1.0 (screen shot).

Features:

- Calculates for missing values (calculation solver).
- Calculates standard and spreadsheet (loan) type leases.
- Allows data to be saved and retrieved in as many different files as desired.
- Prints amortization schedules, payment schedules, depreciation schedules, and customer quotes.
- Contains option to calculate by money factor.
- Contains option to calculate end value as a percentage of capitalized cost (residual %).
- Allows zero percent interest rates.
- Allows report headings to be customized using the built-in RTF editor.

c. AmortizeIt!

- Version 3.0 is available at <http://pine-grove.com>.
- Program has a 21-day full use trial period.
- Cost of the software is \$24.95.
- This calculator provides a narrative and charts to explain the conclusion it reaches.

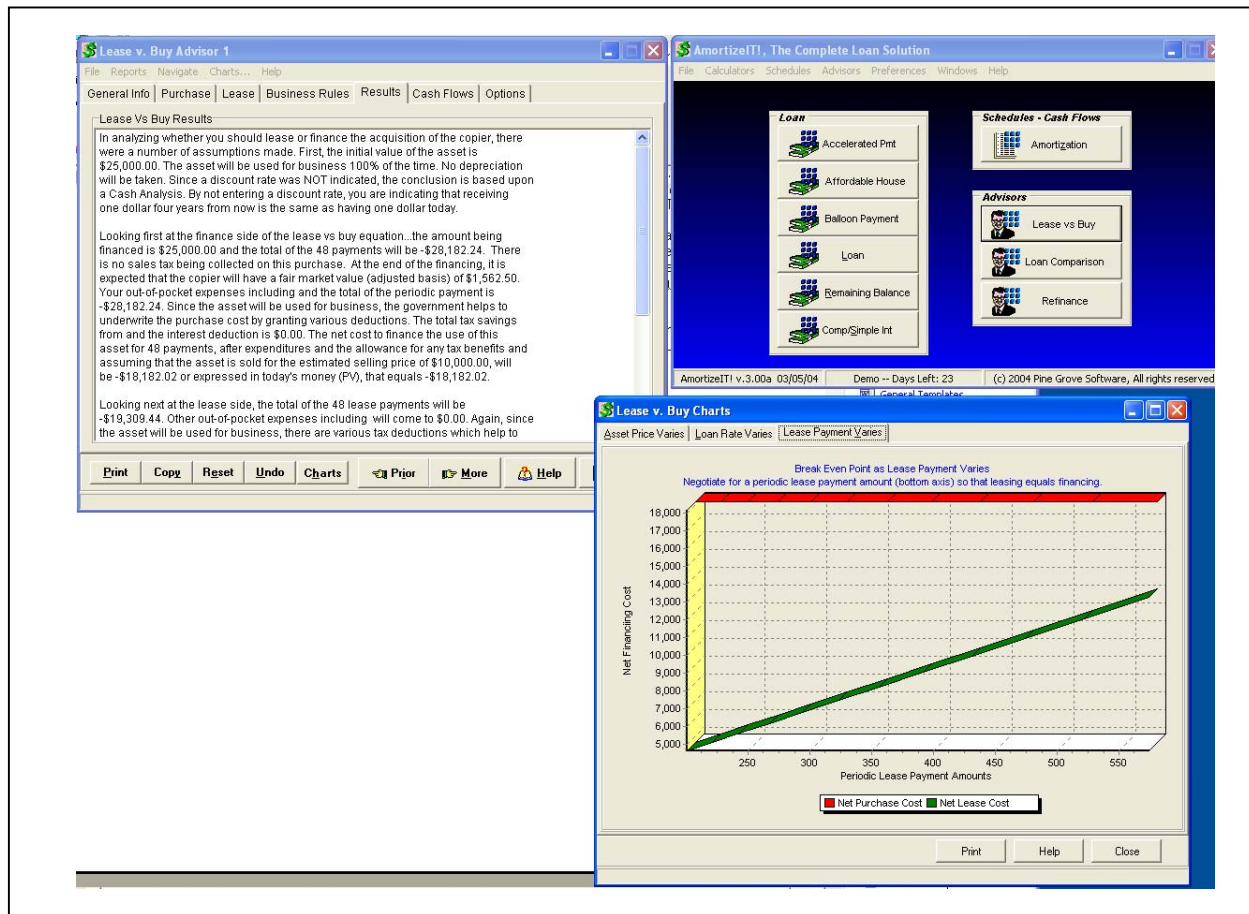


Figure 3. AmortizeIt!, Version 3.0 (screen shot).

Features:

- This calculator allows the user to print a detailed projected cash flow for both the financing side as well as the lease side of the problem
- The program calculates cash flows for both the lease and buy scenarios
- Calculator includes a charting module that visually shows the lease costs vs. the cost of financing.

d. FinLease

- Version 1.5 is available at <http://paranzasoft.com>.
- Calculations can only be made up to \$10,000 until the software is registered.
- Cost of the software is \$45.00.
- This calculator runs on Mac OSX® only.

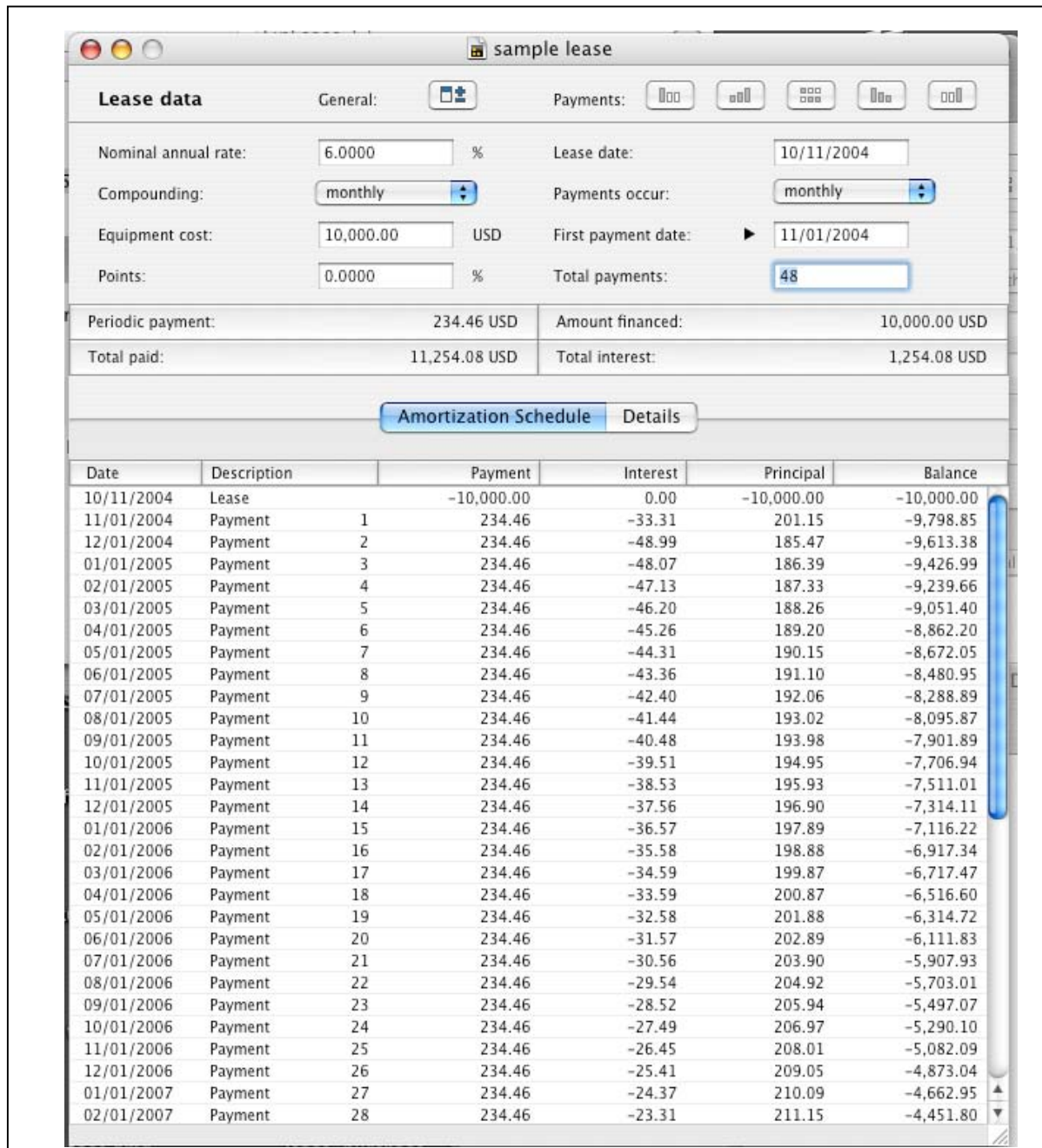


Figure 4. FinLease, Version 1.5 (screen shot).

Features:

- User entered first payment date
- Compounding frequencies ranging from annually to daily
- Payment frequencies ranging from annually to weekly
- Choose from six different day count conventions
- Specify end of month adjustments
- Choose from four different rounding options
- One, two, three advance payments, no advance payment, or a percentage of equipment cost as advance payment
- Up to 12 groups of 12 step up payments, either as a percentage of regular payments, a fixed amount or interest only
- Up to 12 groups of 12 step down payments, either as a percentage of regular payments, a fixed amount or interest only
- Residual payment, either as a percentage of equipment cost or as a fixed amount, occurring on the normal end date, on the last payment date or one month after the last payment date

4. **CONCLUSION.** After testing the applications, AmortizeIT! was selected as the application that best meets the needs of the user; FinLease was the next best application. The AmortizeIt! program has an extensive help menu and explains in detail how it calculates formulas. FinLease has almost the same features, but is not as user friendly.